# 1000 - Construction Development Projects

AIP sponsors have the direct responsibility for monitoring all aspects of project accomplishment. The sponsor must ensure that all requirements of the grant agreement and the approved plans and specifications are fulfilled. The sponsor must also ensure that Federal labor and civil rights requirements are followed and that actual participation of DBE firms is adequately monitored.

Sponsors are required to provide competent and qualified engineering supervision and construction inspection. The resident engineer must keep adequate daily records. The contractor's weekly progress must be documented and compared to the baseline construction schedule submitted at the start of construction. Potential delays in completion of the construction should be identified and properly addressed.

At the time of final acceptance, the Sponsor shall be in position to adequate address each checklist item in the "Sponsor Certification for Construction Project Final Acceptance".

## **RESOURCES**

# **Advisory Circulars**

- AC 150/5300-9: Preconstruction Conferences for AIP Projects
- AC 150/5370-10: Standards for Specifying Construction

#### **Forms**

- Sponsor Certification for Final Acceptance: MS Word | PDF
- Sponsor Certification for Award of Contract: MS Word | PDF

# 1010 – Bidding Development Projects

For construction projects exceeding the simplified acquisition threshold (\$100,000), the preferred method of procurement is by sealed bids (49 CFR Part 18.36.d). This method assumes that two or more qualified bidders are available and that award will be made to the lowest responsive and responsible bidder. The sealed bid method allows the establishment of a contract based on a firmed fixed price.

## Solicitation

Under the sealed bid method, the invitation to bid shall be publicly advertised in order to solicit an adequate number of bidders. AIP does not establish a time frame for how long a sponsor must advertise for bids. State and local procurement provisions may dictate a minimum timeframe. 49 CFR Part 18 does state that a sufficient amount of time be provided in order to allow prospective bidders to prepare a responsive proposal. For relatively small and simple projects this may only be two weeks. For larger complex projects, this may be 45 to 60 days. For most projects, a bid period of 30 days has proven to be a sufficient time frame that permits prospective bidders to prepare and submit a proposal.

## **Bid Opening**

All bids are to be publicly opened at the time and place identified within the invitation for bids. All Bids submitted by the specified time and date shall be read aloud. Bids received after the specified date and time shall be automatically rejected.

#### **Bid Evaluation**

Once bids are opened, an apparent low bidder will be identified. The award of contract however, should not be made until the sponsor has thoroughly evaluated all submittals.

During this evaluation period, which should be identified within the Instructions-to-Bidders, the Sponsor should review each proposal for such things as bid errors, irregularities, responsiveness, bid guarantee, qualified bids and other relevant bid issues. The extension of all unit prices for each bidder should also be checked.

Bid proposals found not to be responsive or found to be irregular should be rejected. The reason for rejection should be thoroughly documented.

A tabular summary shall be prepared that lists each bidder's proposed unit prices as well as the engineer's estimate. At this point, the Sponsor with assistance from their consultant should make a determination on whether the apparent low bidder's proposal is responsive and whether it represents a fair and reasonable price.

The evaluation and determination shall be adequately documented such that a third party auditor may easily track the history of the procurement action.

#### **RESOURCES**

#### **Forms**

Sponsor Certification for Award of Contract: MS Word | PDF

## **Federal Regulations**

 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

# 1020 - Contract Award Development Projects

#### General

Once bids have been received and properly evaluated; the award of contract must be made to the lowest responsive and responsible bidder [49 CFR Part 18.36(d)(2)(ii)(D)]. The Sponsor should typically notify the apparent low bidder through issuance of a "Notice of Award". The issuance of the "Notice of Award" should not be construed as a binding agreement. The executed contract agreement will serve as the binding contract.

## **Bid Guaranty**

The bid guaranty of the apparent low bidder and the next low bidder are generally held by the sponsor until a contract agreement is executed. If the apparent low bidder fails to execute the contract agreement, the Sponsor may recover the bid guaranty as a liquidated damage and award of contract would then proceed to the second low bidder.

#### **FAA Concurrence**

Prior to entering into a contract agreement, the FAA will conduct a review the award of contract for the purpose of assuring compliance with AIP provisions. Once the Sponsor's governing body has concurred in the award of contract, the Sponsor must submit the following information to the FAA:

- 1. **Cover letter:** Letter should indicate that the Sponsor has thoroughly evaluated the bid by the apparent low bidder and has determined the bidder to be responsive and responsible and that the contract price is considered fair and reasonable.
- 2. Copy of Bid Tabulation Summary:
- 3. **DBE Information:** Sponsor shall submit the following:
  - Completed DBE Letter of Intent
  - DBE Utilization forms.
  - Written affirmation by the DBE subcontractor attesting to their participation
  - Copy of the DBE's current certification
- 4. Sponsor Certification for Award of Contract

## **Contract Execution**

The intent of bidding by the sealed bid method is for the Sponsor to enter into a firm fixed price contract with the contractor. Once FAA approval is granted in the award of contract, the sponsor may proceed with formally executing the contract.

Upon execution of the contract, the Contractor should also submit the required performance and payment bonds. Unless otherwise specified, the Contractor shall be required to submit the required bonds within two weeks of the contract execution. Executed bonds should not be delivered <u>prior</u> to the contract execution.

A copy of the executed contract along with the executed performance and payment bonds must be submitted to the FAA prior to the Notice-to-Proceed.

## RESOURCES

#### **Advisory Circulars**

- AC 150/5300-9: Preconstruction Conferences for AIP Projects
- AC 150/5370-10: Standards for Specifying Construction

# **Forms**

- DBE Utilization Statement: MS Word | PDF
- DBE Letter of Intent: MS Word | PDF
- Sponsor Certification for Award of Contract: MS Word | PDF

# **Grant Obligations**

• Airport Sponsor Assurances (pdf)

1000-4

# 1030 - Construction Management Program Development Projects

#### General

Sponsors are obligated by grant assurance #17 to provide and maintain competent technical supervision at the construction site throughout the project to assure conformance with the approved plans and specifications. For paving projects expected to exceed \$250,000, a grant condition is incorporated requiring the preparation and submittal of a construction management program.

The Construction Management Program (CMP) also referred to as the Construction Observation Program, details the measures and procedures that are required to assure compliance with the quality control provisions of the construction contract. The AIP Sponsor is required to submit a copy of the CMP to the FAA for review and approval prior to issuance of the Notice-to-Proceed.

## STANDARDS FOR CONSTRUCTION OBSERVATION

In order to be deemed acceptable, the submitted Construction Management Program must satisfactory address minimum standards and qualifications for Personnel, Equipment, and Facilities to be provided by the consulting engineering firm responsible for construction observation services. The plan must also identify the required tests for quality control and acceptance, including frequency of tests and action limits.

At least a minimum of 10 days prior to the preconstruction meeting, the Engineer shall submit a Construction Observation Program (COP) to the FAA for review and approval. FAA concurrence with the issuance of the Notice-To-Proceed is contingent upon submittal of an acceptable observation program.

The minimum standards for an acceptable construction management program are as follows:

# I. Construction Observation Program (COP):

The COP shall detail the measures and procedures to be utilized by the Engineer to comply with quality assurance provisions of the construction contract, including but not limited to all tests required by the project specifications. The program shall include the following items as a minimum:

- Scope of Work: Brief narrative that describes the general scope of the project work.
- b. Name and title of the Sponsor's authorized representative (Airport Manager, City Engineer etc.).
- c. Name of Contractor and project Superintendent.
- d. Name of Project Engineer/Manager that has overall responsibility for administration of the construction contract. This person shall have the authority, as described in Section 50-08 of AC 150/5370-10, to take necessary actions to assure compliance with the contract requirements.
- e. Name of Resident Observer. Identify the limits of the observer's responsibilities
- f. Name of Sponsor's Quality Assurance testing laboratory and a copy of their certificate of accreditation. For FAA standard paving materials, the accreditation shall be from a nationally recognized accreditation program (AASHTO, NVLAP, A2LA, etc.) as opposed to a State Highway program. The laboratory must be accredited for the specific tests required of the specified material.
- g. Name of Contractor's Quality Control testing laboratory including a point of contact.

- h. Names of any other engineering firms with quality assurance responsibilities for the project including a description of the services to be provided by each firm.
- i. List qualifications for the Project Engineer, site inspectors, laboratory personnel, and testing personnel.
- j. Itemized listing of all tests required by the contract specification, including the type and frequency of tests to be taken, the method of sampling, the applicable test standard, and the acceptance criteria or tolerances permitted for each type of test.
- k. Identify procedures for assuring that:
- Tests are taken in accordance with the approved construction observation program;
- m. Tests are documented properly;
- n. Corrective actions / retesting is taken for failed tests;
- Mix designs meet project specifications and Engineer's approval is properly documented,
- p. Quality and quantity of materials meet project requirements;
- q. Reports are transmitted to proper parties.

# II. Engineer's Field Office and Laboratory, Equipment and Contract Documents

- The Engineer shall assure that a facility suitable for use as a field office and laboratory is provided for within the construction contract documents (Ref. Section 60-05)
- b. The Engineer shall assure that equipment required for surveying, material testing, and project inspection is provided for within the construction contract specifications and is in proper working order.
- c. The Engineer shall assure that approved plans and/or specifications are available to construction observation and testing laboratory personnel employed by the Engineer or working under contract with the Engineer.

## **III. Personnel Qualifications**

- a. <u>Project Engineer/Manager</u>: The Project Engineer/Manager shall be a Professional Engineer, licensed in the state where construction takes place (or a reciprocal state), and shall have overall responsibility for construction observation of the project.
  - The engineer must be on the project site at the beginning of any critical operations and shall supervise all additional construction observation personnel Critical operations shall be specifically defined in the Construction Observation Program (COP).
  - The engineer shall have authority to make decisions regarding the project, subject to approval of the sponsor/owner and the FAA. Official project documents (i.e. change orders, inspection reports, etc.) shall always be signed by the Project Engineer.
  - Unless otherwise approved by the FAA, the Project Engineer shall meet the following minimum requirements:
  - Earthwork 3 years experience in earthwork construction.
  - Base and Subbase 3 years experience in base and subbase construction
  - Concrete or Asphalt 5 years experience in airport or highway pavement construction.

#### b. Resident Observer

The engineering consulting firm may supplement the Project Engineer with a resident observer. The use of a Resident Observer does shall not diminish the responsibility of the Project Engineer. The Project Engineer must be present at the start of all critical operations to assure contractor compliance. The Resident Observer may assist the Project Engineer with construction observation but shall not assume the overall responsibility of the Project Engineer. The qualifications for construction observation personnel will vary depending upon the material being placed. Consult the minimum standards for materials to ascertain the minimum qualifications for the resident observer.

# c. Field Testing Personnel

Unless otherwise specified, field-testing personnel shall have a minimum of oneyear experience in field-testing of the material being placed or constructed. In lieu of working experience, a certificate of completion from an acceptable training course may be accepted subject to FAA approval.

## d. Laboratory Personnel

The supervisors of the main testing laboratory and field laboratory shall have as a minimum; two years of prior employment with the official project testing laboratory or other testing laboratories with approved accreditation. The supervisor is ultimately responsible for the testing activity, but need not be present for field sampling or field-testing.

# IV. Testing Laboratory

- a. The laboratory furnishing testing services for the project shall be tested for proficiency by a nationally recognized accreditation program i.e. AASHTO, NVLAP or A2LA. If a testing laboratory can show evidence that it has applied for and paid necessary fees to a acceptable laboratory accreditation program, such evidence may on an interim basis, satisfy this requirement. The laboratory shall only be required to have accreditation for tests required in the project.
- b. Testing functions occurring in the field such as density testing, material sampling, or specimen preparation may be performed by accredited laboratory personnel or other qualified personnel. Field-testing personnel shall have as a minimum, one year of experience with the appropriate material and construction methods.

# V. Surveying

- a. The surveying included in this portion of the observation program is limited to that required for construction of the project. All field notes and data collected during design should be made available to the Project Engineer regardless of who designs the project. The survey party shall consist of a qualified party chief and survey crew. All survey equipment shall be verified for proper working operation prior to use. If property surveying is required, the party chief shall be a registered land surveyor.
- b. Horizontal and Vertical Control: Per Section 50-06 of AC 150/5370-10, the Sponsor's engineer shall be responsible for establishing horizontal and vertical control. Occasional spots shall be required to assure the integrity of the control monuments. Due to accuracy requirements for aeronautical information, the construction monuments for runway projects shall be tied into the National Geodetic Service (NGS) survey Datums. For horizontal control, the referenced datum shall be NAD83. For vertical control, the referenced datum shall be NAVD88. The construction monuments shall be adequately protected throughout the duration of the project.

- c. <u>Construction Layout and Staking</u>: The Contractor shall accomplish construction layout and staking by using horizontal and vertical control monuments established by the Sponsor's surveyor. The Sponsor shall avoid situations that use the engineering consultant to accomplish construction layout and staking. The responsibility and risk associated with construction layout and staking shall remain with the Contractor.
- d. During the course of the project work, the Sponsor's survey party shall make spot checks on alignment, verify proper cross sections of the completed pavement layers (subgrade, subbase, base course and surface course) and verify final cross sections for computing final pay quantities.

# VI. Construction Observation and Material Testing

## a. Subgrade, Subbase, and Base Course Construction Personnel.

- 1. <u>Field Construction Observer</u>: The Sponsor's Engineer shall provide at least one on site construction observer per shift with a minimum of 2 years experience in earthwork, and aggregate subbase/ base course construction. Subject to FAA approval, a four-year college degree in engineering or a certificate of completion from an acceptable training course may be substituted for up to one year of experience. If additional assistant construction observers are required they shall have a working knowledge of earthwork and subbase/base coarse construction procedures.
- Field Testing Personnel: Unless otherwise specified, field testing personnel shall have a minimum of one year experience in field testing of subgrade, subbase, and base courses. In lieu of working experience and subject to FAA approval, a certificate of completion from an acceptable training course may be accepted.
- 3. <u>Laboratory Personnel</u>: The supervisor(s) of the main testing laboratory and field laboratory shall have as a minimum; two years of prior employment with the official project testing laboratory or other testing laboratories with approved accreditation. The supervisor is ultimately responsible for the testing activity, but need not be present for field sampling or field testing.

# b. Bituminous Paving Observation Personnel.

- Field and Plant Inspectors: The Sponsor's Engineer shall furnish a sufficient number of observers to adequately observe plant and field lay down operations. A minimum of one on site observer per shift shall have at least five years of experience in the field of bituminous pavement construction. Subject to FAA approval, a four-year college degree in engineering or a certificate of completion from an acceptable training course may be substituted for up to one year of experience. Additional assistant observers must have a working knowledge of the appropriate construction procedures. This includes observers for construction of bituminous seal coats and surface courses.
- Field Testing Personnel: Unless otherwise specified, field-testing personnel shall have a minimum of one year experience in field testing and sampling of bituminous concrete. In lieu of working experience and subject to FAA approval, a certificate of completion from an acceptable training course may be accepted.
- 3. <u>Laboratory Personnel</u>: The supervisor(s) of the main laboratory and field laboratory shall have a minimum of two years of supervisory employment with this laboratory or other laboratories with approved accreditation.

Additional laboratory personnel shall have a working knowledge of bituminous mixture testing. The supervisor is ultimately responsible for the testing activity, but need not be present for field sampling or field testing.

## c. Concrete Paving and Structural Concrete Observation Personnel.

- 1. <u>Field Observers</u>: The Sponsor's Engineer shall furnish a sufficient number of observers to adequately observe plant and field placement operations. A minimum of one on site observer per shift shall have at least 5 years experience in concrete pavement construction. Subject to FAA approval, a four year college degree in engineering or a certificate of completion from an acceptable training course may be substituted for up to one year of experience. The observer shall be on site during the placing, initial sawing and initial curing operations. Additional assistant observers shall have a working knowledge of concrete paving procedures.
- Field Testing Personnel: Unless otherwise specified, field-testing personnel shall have a minimum of one-year experience in field testing and sampling of portland cement concrete. In lieu of working experience and subject to FAA approval, a certificate of completion from an acceptable training course may be accepted.
- 3. <u>Testing Laboratory Personnel</u>: The supervisor of the main laboratory and field laboratory shall have a minimum of two years of employment with this laboratory or other laboratories that have approved accreditation. Additional laboratory personnel shall have a working knowledge of concrete testing. The supervisor is ultimately responsible for the testing activity, but need not be present for field sampling or field testing.

## d. Manufactured Materials

For manufactured items such as cement, asphalt, steel, lime, flyash and etc., the Project Engineer may accept the vendor's certification that the materials meet the specifications or may require the material to be tested for compliance to the specifications.

## e. Report of Test Results to the Contractor:

The Contractor shall be verbally notified of the test results immediately after the tests have been completed. The information shall include the results of the tests and any payment deductions due to substandard construction materials. In no case shall the Contractor be verbally notified later than 4 working hours after the test results have been completed. Additional written notification shall be provided to the Contractor within 7 days after the tests have been completed.

# f. Retesting:

The testing laboratory shall provide written notification to the Sponsor and the Contractor of additional costs incurred from retesting of failed materials and additional quality assurance tests.

# VII. Reports

- a. Weekly Reports: Tests reports including types of tests taken, applicable standards, location of tests, tests results (highlighting those test which fail specification requirements), provisions for failed tests, and specification requirements shall be recorded and filed in a timely and orderly manner and shall be made available for review by the FAA upon request.
- b. Final Report: At the end of the job the Project Engineer shall submit a final test and quality control report documenting the results of all tests performed. Those tests that failed or did not meet the applicable test standard shall be highlighted and corrective action / retesting noted. The report shall include the pay reductions applied and justification for accepting any out-of-tolerance materials.

## **RESOURCES**

# **Advisory Circulars**

• AC 150/5370-10: Standards for Specifying Construction

## **Grant Obligations**

• Airport Sponsor Assurances (pdf)

# 1040 - Preconstruction Conference Development Projects

The preconstruction conference offers a forum for all interested parties to discuss the scope of the project and its impact on normal airport operations. The primary purpose of the conference is to thoroughly discuss critical project issues such as contract requirements, operational safety, construction phasing, airport security, quality control, acceptance testing, labor requirements, EEO obligations, DBE requirements and other pertinent concerns.

As each project may be unique in type and complexity, the agenda for each conference should be tailored to address the concerns of the specific project.

## Scheduling of Conference

The preconstruction conference should be scheduled immediately following FAA's concurrence with the award of contract to the apparent low bidder contractor. We request a minimum of 10 (ten) days advance notice in order to permit adequate time to inform interested FAA offices.

### **Conference Administration**

The Sponsor or their delegated consultant engineer is responsible for conducting the preconstruction conference. A prepared agenda should be distributed at the start of the meeting. Minutes of the meeting should be recorded and filed with the project documents. A report summarizing the discussion should be prepared and disseminated to all participants.

### **Participants**

As a minimum, the following parties should be present at the conference:

- Airport Sponsor/Manager
- Sponsor's Consultant Engineer
- Proposed Resident Engineer/Observer
- Sponsor's Acceptance Testing Laboratory
- Contractor (Owner or authorized representative)
- Contractor's Project Superintendent
- Contractor's Quality Control Laboratory

Additional parties that should be invited may include the following:

- FAA State Airport Engineer
- FAA Airway Facilities Representative (if project impacts FAA owned facilities)
- Air traffic control (if project warrants participation)
- Local Airport Tenants (A separate meeting might be more appropriate to discuss tenant concerns)
- Subcontractor's

## **Conference Agenda**

The conference agenda should, as a minimum, include the items listed below. Advisory Circular AC 150/5300-9a presents a complete listing of recommended agenda items. The type, magnitude and uniqueness of a project will likely necessitate modifications to the standard agenda.

- 1. Identify main points of contact
  - Owner, Owner's Representative, Contractor, Superintendent, Resident Engineer, etc.

- Identify roles and responsibilities of each party
- 2. Scope of work
  - Include general plan or chart to depict work
  - Proposed schedule of work
  - Identify construction phasing concerns
- 3. Issuance of Notice-To-Proceed contingent upon;
  - Execution of grant agreement
  - Submittal of executed contract & required bonds
  - FAA Approval of DBE participation
  - FAA Approval of Construction Observation Program
  - Submittal of a properly executed sponsor certification
- 4. Operational safety & security
  - Construction limits
  - Runway and taxiway safety areas
  - Impact to airport operations
  - Safety requirements of AC 150/5370-2e
  - Vehicular traffic within the A.O.A.
  - Staging area
  - Haul routes
  - Stockpiles
  - Foreign Object Debris (FOD)
  - Temporary markings & Barricades
  - Requirement for filing FAA Form 7460-1 (Airspace Analysis)
  - Security Requirements
- 5. NOTAMS
  - Airport Operator ( D NOTAMS)
  - FAA Airway Facilities (Facility Outages)
  - Kansas City Flight Procedures Office (Approach Procedures)
- 6. FAA Airway Facilities
  - AF Facility Outages
  - Location of buried cables
- 7. Construction Observation
  - Identify Contractor's laboratory
  - Identify Sponsor's laboratory
  - Acceptance testing versus Quality Control testing
- 8. Labor Requirements
  - Davis Bacon Wage Rates
  - Labor poster
  - Submittal of payrolls
- 9. Civil Rights/DBE Requirements
  - Remind Contractor that project is subject to the EEO clause
  - EEO posted notices
  - DBE Monitoring
- 10. Modification Process
  - Regional Policy

- 11. Utilities
  - Locating
  - Protection
- 12. Environmental Issues
  - Storm Water Permitting
  - Waste Disposal

# **RESOURCES**

# **Advisory Circulars**

- AC 150/5300-9: Preconstruction Conferences for AIP Projects
- AC 150/5370-10: Standards for Specifying Construction

# **Required Posted Notices**

- <u>Davis Bacon Poster WH 1321</u> DOL Poster
- EEO Poster WH 1321 DOL Poster

# 1050 - Notice-to-Proceed Development Projects

The Sponsor's issuance of the Notice-to-Proceed to the Contractor should not be made until FAA concurrence is obtained. FAA will review the project documentation to ensure that all AIP requirements are fulfilled and that preconstruction requirements have been met.

## **Conditions for FAA Concurrence**

The following conditions must be met in order to receive FAA concurrence in the issuance of the Notice-to-Proceed:

## 1. Proper Execution of the Contract:

All parties must properly execute the contract agreement.

# 2. Bonding Requirements Fulfilled:

The Contractor must submit satisfactory Performance and Payment Bonds issued from a solvent surety.

# 3. DBE Participation Approved:

The FAA Civil Rights Office must approve the Contractor's proposed DBE participation. For proposed participation that does not meet the Sponsor's advertised goal, documentation of the Contractor's good faith efforts must be submitted for FAA review.

#### 4. Construction Observation Plan:

For projects involving airfield paving, a satisfactory construction observation plan must be prepared and submitted by the Sponsor's engineering consultant.

# 5. Proper Execution of Grant Agreement:

With the exception of projects funded entirely by primary entitlement funds, no development shall take place unless the associated grant agreement has been duly executed. Any actual construction that occurs prior to establishment of the associated grant agreement becomes ineligible for AIP participation.

### 6. Acceptable Airport Property Interests Are Held:

The sponsor must assure the FAA that they hold good title interest for the property on which the development is to be performed. This condition is generally addressed with the project application by the submittal of the Certificate of Title and Exhibit A property map.

## **Contractor's Proposed Construction Schedule:**

Section 80 of AC 150/5370-10a requires the Contractor to submit for approval a copy of their proposed progress schedule within 10 days of the issuance of the NTP. A copy of this schedule shall be submitted to the FAA once submitted to the Sponsor.

## **RESOURCES**

# **Advisory Circulars**

- AC 150/5300-9: Preconstruction Conferences for AIP Projects
- AC 150/5370-10: Standards for Specifying Construction

# 1060 - Labor Provisions Development Projects

AIP Sponsors with construction projects that exceed \$2,000 are required to comply with applicable Federal Labor provisions. This requirement is established in the grant assurances and is considered a condition of grant acceptance.

The Department of Labor (DOL) maintains oversight and enforcement over regulations and laws pertaining to labor standards. As an AIP grantee, the Sponsor assumes a role in providing day-to-day administration and monitoring of applicable labor standards.

Federal Regulations 29 CFR Part 5 establishes the provisions for labor requirements on construction projects exceeding the \$2,000 threshold. FAA Advisory Circular 150/5100-6D serves as a guide for AIP Sponsors in complying with applicable labor provisions.

Sponsors should note that at the conclusion of an AIP project, the Sponsor is required to certify compliance with the applicable labor provisions. The form "Sponsor Certification for Final Acceptance" contains various questions regarding the Contractor's compliance with labor requirements.

## Responsibilities of the Sponsor

As an AIP grantee, the Sponsor assumes a responsibility for ensuring compliance with relevant labor standards. This responsibility includes but is not limited to the following:

- To incorporate a copy of the current wage rate determination as issued by the DOL in each bid solicitation (29 CFR Part 1.6). Current wage rates may be accessed at www.access.gpo.gov/davisbacon/. The selected determination should contain worker classifications that are most appropriate for the type of work being undertaken.
- To include in all construction contracts expected to exceed \$2,000, contract clauses and provisions as required by 29 CFR Part 5.5.
- To award contracts conditioned on the acceptance and adherence of the appropriate wage determination.
- To report all suspected or reported violations to the DOL.
- To withhold from the Contractor accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the contractor the full amount of wages required per the contract (29 CFR Part 5.5)
- To review weekly payroll records in order to ascertain compliance with the applicable wage rate determination.
- To conduct labor standard interviews for purposed of assuring compliance. Form DOT F 4220.5 is available to assist in conducting this interview. There is no established frequency for conducting such interviews. 29 CFR Part 5.6 states that interviews shall be conducted with such frequency as necessary to assure compliance with labor standards.
- To verify that award of contract is not being made to a firm debarred for violations of the Davis-Bacon Act.
- To assist in the classification of any laborer or mechanic not classified under the appropriate wage determination.
- To discuss labor standards during the preconstruction meeting in order to achieve an understanding of the requirements for each individual party.

# **RESOURCES**

# **Advisory Circulars**

• AC 150/5100-6: Labor Requirements for the Airport Improvement Program

# **Department of Labor Requirements**

- <u>Davis Bacon Wage Rate Determinations</u>
- Davis Bacon Poster WH 1321 DOL Poster
- EEO Poster WH 1321 DOL Poster

# **Federal Regulations**

• <u>29 CFR - Labor</u>

# **Forms**

• SF 1445 (PDF)- Labor Standards Interview

# 1061 - Contractor's Responsibilities Development Projects

# **Responsibilities of the Contractor**

As a contractor on an AIP funded construction project, the Contractor assumes the following obligations:

- Pay the laborers and mechanics the wages and fringe benefits stipulated by the appropriate wage determination.
- Post the wage rate determination and the Davis Bacon Poster (WH-1321) in a prominent and conspicuous location on the job site.
- Ensure that all construction contracts contain the appropriate labor provisions established in 29 CFR Part 5.5.
- Maintain payrolls and records for all laborers and mechanics engaged in the project work.
  Records shall be retained for a period not less than three years from completion date of the project.
- Submit to the Sponsor or their representative a copy of weekly payrolls consisting of the following minimum information.
  - o Name, Address and Social security number
  - Classification and hourly rate
  - o Daily and weekly number of hours worked
  - o Itemization of Deductions
  - Actual wages and fringe benefits.
- Maintain written evidence of the registration or apprenticeship programs

# **RESOURCES**

# **Advisory Circulars**

• AC 150/5100-6: Labor Requirements for the Airport Improvement Program

## **Department of Labor Requirements**

- Davis Bacon Wage Rate Determinations
- Davis Bacon Poster WH 1321 DOL Poster
- EEO Poster WH 1321 DOL Poster

## **Federal Regulations**

• 29 CFR - Labor

## **Forms**

SF 1445 (PDF) – Labor Standards Interview

# 1062 - Applicable Labor Standards Development Projects

#### **APPLICABLE REGULATIONS**

Listed below are some of the applicable statutes and regulations pertaining to labor standards. This list shall not be considered as all inclusive of regulations pertaining to labor standards. Additional regulations, policies, executive orders and other regulations that may apply are not shown below. Consult the Department of Labor <a href="Employment Law Guide">Employment Law Guide</a> for a comprehensive view of labor requirements. The information provided below is based on information provided on the DOL website.

**Davis-Bacon Act (DBA)** - The Davis Bacon Act requires payment of prevailing wages and fringe benefits for all AIP projects expected to exceed \$2,000. This requirement extends to all subcontractor's employed under the prime contractor.

The Sponsor shall assure that a current wage rate determination and the DBA contract provision be included in the project bid solicitation. The wage determination must also be posted at the job site in a conspicuous location.

While the issuance of a change order would not require an update to the contract wage determination, the execution of a supplemental agreement, which exceeds \$2,000, does require such an update. Supplemental agreements generally cover work not included in the original scope of work.

For labor classifications not included in the wage determination, the contractor and Sponsor shall jointly complete Standard Form 1444 for submittal and approval by the DOL. The Sponsor and contractor should note that this process may take up to thirty 30 days to resolve.

Contract Work Hours and Safety Standards Act (CWHSSA) - The Contract Work Hours and Safety Standards Act (CWHSSA) applies to contractors and subcontractors with federal service contracts and federally funded and assisted construction contracts that exceed \$100,000. The Act requires contractors and subcontractors with covered contracts to pay laborers and mechanics employed in the performance of the contracts one and one-half times their basic rate of pay for all hours worked over 40 in a workweek. This Act also prohibits unsanitary, hazardous, or dangerous working conditions in the construction industry on federal and federally financed and assisted projects.

The CWHSSA provides most workers on federal assisted contracts the right to receive time and one-half for overtime hours worked on such contracts. The DOL Wage and Hour Division accepts complaints of alleged CWHSSA wage violations.

Contractors or subcontractors who violate this Act may be subject to fines, imprisonment, or both. Intentional violations of this Act are misdemeanors and may be punished by a fine not to exceed \$1,000 or by imprisonment for not more than six months, or both. Overtime wage violations may result in the assessment of liquidated damages in the sum of \$10 for each calendar day an employee is allowed to work in excess of a 40-hour workweek without payment of the required overtime compensation.

Accrued contract amounts may also be withheld in sums necessary to satisfy the liability for unpaid wages and liquidated damages. Employees have rights of action and/or of intervention against the contractor and its sureties if the amounts withheld are insufficient to reimburse the unpaid wages. Contractors or subcontractors found to have committed willful or aggravated violations of the overtime requirements may have their contracts terminated and may be declared ineligible to receive future contracts for a period not to exceed three years.

# Copeland Anti-Kickback Act

The "Anti-Kickback" section of the Copeland Act applies to all contractors and subcontractors performing on any federally funded or assisted contract for the construction, prosecution, completion or repair of any public building or public work, except contracts for which the only federal assistance is a loan guarantee. This provision applies even where no labor standards statute covers the contract.

The regulations pertaining to Copeland Act payroll deductions and submittal of the weekly statement of compliance apply only to contractors and subcontractors performing on federally funded contracts in excess of \$2,000 and federally-assisted contracts in excess of \$2,000 that are subject to federal wage standards.

The "Anti-Kickback" section of the Act precludes a contractor or subcontractor from in any way inducing an employee to give up any part of the compensation to which he or she is entitled under his or her contract of employment. The Act and implementing regulations require a contractor and subcontractor to submit a weekly statement of the wages paid to each employee performing on covered work during the preceding payroll period. The regulations also list payroll deductions that are permissible without the approval of the Secretary of Labor and those deductions that require consent of the Secretary of Labor.

The "Anti-Kickback" provisions of the Copeland Act give covered workers on subject federal contracts the right to receive the full pay to which they are entitled for the work they perform. The Act also gives such workers the right to receive pay on a weekly basis. The DOL Wage and Hour Division of the Employment Standards Administration accepts complaints of alleged Copeland Act wage violations.

Any contractor or subcontractor who induces an employee working on a covered contract to give up any part of the compensation to which he or she is entitled is subject to a \$5,000 fine, or imprisonment for up to five years, or both. Willful falsification of the statement of compliance may subject the employer to civil or criminal prosecution and may be cause for contract termination or debarment. Contractors may challenge determinations on debarment before an administrative law judge. Decisions of administrative law judges may be appealed to the Administrative Review Board. Final determinations on debarment may be appealed to and are enforceable through the federal courts. Civil and criminal sanctions are pursued through the federal courts.

#### Occupational Safety and Health Act

In general, the Act covers all employers and their employees in the 50 states, the District of Columbia, Puerto Rico, and other U.S. territories. Coverage is provided either directly by the federal Occupational Safety and Health Administration (OSHA) or by an OSHA-approved state job safety and health plan. The Act applies to employers and employees regardless of whether Federal assistance is present or not.

Compliance with OSHA requirements is primarily the responsibility of the Contractor. The Sponsor through their consultant however, should report any suspected violation of OSHA standards to the DOL for prompt resolution.

## **RESOURCES**

## **Advisory Circulars**

AC 150/5100-6: Labor Requirements for the Airport Improvement Program

# **Department of Labor Requirements**

- Davis Bacon Wage Rate Determinations
- Davis Bacon Poster WH 1321 DOL Poster

- <u>EEO Poster WH 1321</u> DOL Poster
- Employment Law Guide DOL Guidance
  - Contract Work Hours and Safety Standards Act (CWHSSA)
  - Occupational Safety and Health Act

# **Federal Regulations**

• <u>29 CFR - Labor</u>

# 1070 – Inspections Development Projects

#### General

An AIP Sponsor assumes the responsibility for monitoring the progress of a project and for ensuring compliance with the approved plans and specifications. Grant assurance #17 states that the Sponsor must provide and maintain competent technical supervision at the construction site throughout the duration of the project.

# **Labor and Civil Rights**

In addition to verifying contractor compliance with technical and contractual requirements, the Sponsor is also tasked with ensuring that applicable labor and civil rights provisions are met. This includes but is not limited to the following:

- 1. The Sponsor shall review weekly payroll records in order to ascertain the contractor's compliance with the applicable wage rate determination.
- 2. The Sponsor shall observe the contractor's work force to verify proper classifications for the work being performed.
- 3. The Sponsor shall verify the Contractor's compliance with applicable requirements of the E.E.O provision.
- 4. The Sponsor shall verify actual participation by the DBE subcontractors.
- 5. Posted notices shall be prominently displayed.

# **Construction Records**

The Sponsor must have a resident observer maintain daily records that sufficiently describe the work accomplished that day. FAA Form 5370-1 is available to assist Sponsors in documenting the construction progress. The use of this exact form is not mandatory.

Sponsors and consultants may customize this report provided that the same information is documented. The FAA does not require the Sponsor to submit the daily records to the FAA, however such records must be made available to the FAA upon request. The Sponsor shall maintain the records for a period not less than three years from the date of project acceptance.

As a minimum, the following information shall be recorded:

- Daily weather conditions
- Worked accomplished that day, including the exact location
- Work day count and contract time
- Estimate of percentage of physical work completed to date
- Hours worked per day
- Material delivered on-site
- Type of equipment in use
- Size of work force including presence of contractor's supervisor
- Acceptance tests conducted and results obtained
- Corrective actions taken by the contractor
- Safety Plan measures implemented or modified
- Identification of critical construction issues

# **RESOURCES**

# **Forms**

- FAA Form 5370-1 (doc): Construction Progress and Inspection
- SF 1445 (PDF)— Labor Standards Interview

# **Grant Obligations**

• Airport Sponsor Assurances (pdf)

# 1071 - Final Acceptance Development Projects

## **Final Acceptance**

At the conclusion of construction, a final inspection shall be conducted for purposes of accepting the work from the contractor. The contractor, resident engineer and Sponsor shall be present for this conference. The Sponsor should give the FAA State Airport Engineer 10 days advance notice of this inspection in order to permit adequate time to properly schedule their attendance if so desired.

FAA attendance at the final inspection is generally subject to availability of travel funds and the timing of the inspection. The FAA's purpose at the final inspection meeting is solely for ensuring that FAA and AIP interests are satisfactory addressed. The Sponsor remains responsible for ensuring compliance with all technical and legal requirements of the contract. The determination of project final acceptance from the contractor must come from the Sponsor and not the FAA. The FAA may not substitute their judgment for that of the Sponsor.

## **Record of Final Inspection**

The Sponsor shall ensure that a record of the final inspection is prepared. The date of the inspection and those present shall be identified. Deficiencies and unfinished work should be listed along with a date for completion of any corrective action. If the deficiencies and unfinished work are minor in nature, the Sponsor may deem the project work to be substantially complete and thus accept the project conditioned upon corrective action being taken to resolve any punch list items.

The record of final inspection should include a statement similar to the following; "Based on visual observation and the results obtained from acceptance tests, the project work is found to be substantially in accordance with the requirements of the contract". The actual final acceptance occurs at the time the contractor and the Sponsor each sign the final construction pay estimate.

## **Runway Commissioning**

The opening of a new or modified runway requires advance notification and submittal of critical aeronautical information. Ten days prior to opening a runway for aircraft operations, the Sponsor shall submit a redlined FAA 5010 report to the FAA in order to ensure accurate runway information is available for updating the various aeronautical publications. If precision and non-precision approaches are affected, advance coordination may be required as early as 8-9 months prior to opening of the runway.

# **Sponsor Certification**

FAA AIP concurrence with the Sponsor's final acceptance is contingent upon the satisfactory completion of the Sponsor certification for "Construction Project Final Acceptance". This certification identifies twelve critical AIP requirements, which are presented in a checklist format. The Sponsor may seek assistance from their consultant when completing this form, however, the designated official of the Sponsor must sign and date the certification. Execution of this certification by the Sponsor's consultant is not permissible.

#### RESOURCES

# **Forms**

- FAA Form 5370-1 (doc): Construction Progress and Inspection
- Sponsor Certification for Final Acceptance: MS Word | PDF

# 1080 - Contract Modifications Development Projects

#### General

Modifications are often warranted for the work covered within an executed construction contract. Such modifications are generally addressed by one of two contract instruments:

- 1) Change Order
- 2) Supplementary Agreement.

Issues regarding eligibility, reasonableness of costs and justification for modification should be addressed prior to execution of a change order or supplemental agreement. Failure to do so may result in the Sponsor assuming the cost of the entire modification without Federal reimbursement.

Substantial time, money and effort can be saved if the Sponsor and Engineer provide advanced notice of contract modifications to the appropriate FAA State Airport Engineer (SAE). Concerns regarding eligibility, reasonableness of costs and justification may be resolved by a phone call thus reducing the chance of misdirected work efforts.

Sponsors should note that the FAA's review and concurrence with a contract modification is limited to a determination of AIP eligibility and does not represent a commitment of Federal funds for the modification. The commitment of additional AIP funds may only be made by a grant amendment.

#### **Definitions**

Section 10 of Advisory Circular 150/5370-10 establishes definitions for critical terms associated with a modification to contract work. These terms are duplicated herein below.

**Change Order** - A written order by the sponsor to the contractor covering changes in the plans, specifications, or bid quantities and establishing the basis of payment and contract time adjustment, if any, of the work affected by such changes. Work covered by the change order shall be within the general scope of the contract (Para. 10-12, AC 150/5370-10A).

**Extra Work** - An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified (Para. 10-20, AC 150/5370-10A).

**Supplemental Agreement** - A written agreement between the Contractor and the owner covering: (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract; or (2) work that is not within the scope of the originally awarded contract (Para. 10-43, AC 150/5370-10A).

**Major and Minor Contract Items** - A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20 percent of the total amount of the award contract. All other items shall be considered minor contract items (Para. 10-27, AC 150/5370-10A)

**Contractual Responsibility:** The Sponsor is the responsible authority, without recourse to the FAA, regarding the settlement and satisfaction of all contractual and administrative issues involving procurements in support of an airport aid grant (49 CFR Part 18.36(b)(11)). Reviews and approvals made by the FAA are limited to determinations for AIP eligibility. The FAA will not substitute its judgment for that of the Sponsor with regard to contractual matters.

**Rights of Sponsor/Engineers:** The Sponsor, as the owner, reserves the right to make alterations in the work as determined to be necessary or desirable to complete the work originally intended in an acceptable manner. The FAA standard General Provision states that the Engineer is authorized to make such alterations in the work as may increase or decrease the original contract quantities. Such alterations that would not result in a 25% cost increase of a major item or an 25% increase in the total contract cost should be covered by a change order. Alterations exceeding the 25% upper limit would have to be covered under a supplemental agreement. (Para. 40-02, AC 150-5370-10A).

The Sponsor and Engineer should note that the above statements refer to the rights of the Sponsor & Engineer over the contractor. These rights do not imply that all such alterations are automatically deemed eligible for AIP reimbursement. The FAA reserves the right to review and determine the extent of the altered work to be declared eligible for reimbursement.

## **RESOURCES**

## **Advisory Circulars**

• AC 150/5370-10: Standards for Specifying Construction

# **Federal Regulations**

 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

# 1081 - Change Order Development Projects

#### General

A Change Order is a contract instrument issued by the Sponsor to the Contractor that addresses modification to work items that fall within the general scope of the contract.

## **Change Order vs Supplemental Agreement**

Change orders are typically initiated to address extra work, eliminate items of work or adjust final contract quantities. All change orders shall be subject to an FAA review and determination regarding eligibility, need and reasonableness of cost. Work included in a change order must be within the general scope of the contract. Extra work that does not fall within the general scope of the contract should be handled by a supplemental agreement.

## **Administering Change Orders**

The Sponsor and Engineer should take appropriate measures to assure that change orders are properly administered. Failure of the Sponsor or the Engineer to adhere to proper change order administration can financially encumber the Sponsor with serious consequences regarding AIP reimbursement.

How change orders are administered will depend on various factors including the extent of modification, the time critical requirements and the cost of the modification. The larger the cost impact, the greater is the need for advanced notification to FAA for purposes of review and approval.

## **Sponsor Cost Analysis**

Change orders that modify unit prices or add bid items shall be accompanied by signed independent cost estimate as well a justification for the modification. Change orders that are limited to modification of existing contract items to actual field quantities would not require such an independent cost estimate but would still require a justification for the altered quantities.

#### **FAA Review**

The Sponsor must seek and obtain FAA concurrence for all change orders in order to determine AIP eligibility. Sponsors should note that the FAA's concurrence in a change order is limited to a determination of AIP eligibility and should not be construed as a commitment of Federal funds for the modification. The formal commitment of additional AIP funds may only be made by a grant amendment.

It is recommended that the Sponsor and the Engineer contact the FAA in advance of the work for the purpose of determining reasonableness of costs and justification for the modification. In order to remain eligible for AIP participation, formal written approval by the FAA is required prior to seeking reimbursement. Sponsors should be aware that change orders that are executed without prior FAA approval have the risk of being declared ineligible for reimbursement.

**Formal FAA Concurrence:** As a minimum, the Sponsor submittal for a proposed supplemental agreement shall contain the following:

- a. Sponsor cover letter that states their concurrence with the change order and the justification for the change.
- b. Change Order document that identifies the estimated quantities, unit prices, description of work, reason for change and adjustment of contract time.
- c. Engineer's independent cost analysis

- d. Justification for time extension (As Needed)
- e. Drawings/Sketches (As Needed)

#### **Verbal Concurrence**

For time critical modifications and small cost changes, the sponsor may seek and obtain verbal approval from the FAA on the condition that the formal request will be promptly submitted.

While the FAA's initial response may be verbal, the Sponsor is still required to provide the FAA documentation on the proposed added work by sending a facsimile of the change order that includes a description, a justification and preliminary cost/time estimates. If found to be acceptable, verbal concurrence will be granted conditioned upon a maximum approved cost increase. Change Order work that would exceed this maximum would require additional FAA review.

The Sponsor and Engineer should strive to formalize verbally approved change orders as quickly as possible.

# **Cost Analysis**

Federal Regulation 49 CFR Part 18.36 requires all contract actions to be subject to a cost analysis. This requirement, which includes contract change orders, is typically addressed by one of two methods; 1) Engineer's Independent Estimate and 2) Justification for Quantity adjustment.

**Engineer's Independent Estimate:** An engineer's independent estimate is required for modifications that involve new contract work items. The purpose of the independent estimate is to ascertain a reasonable and just cost for the modification. In order to ensure integrity of the analysis, the engineer's estimate must be prepared prior to negotiating with the Contractor.

**Justification for Quantity Adjustment:** Modifications that impact existing contract work items already have a unit price established for that item. Unless the modification falls within the criteria of a supplemental agreement (major versus minor contract item), the established unit price is considered reasonable and fair. It thus becomes an issue of justifying for the modified quantities.

We recommend that the adjustment of contract quantities to reflect actual field quantities be incorporated into one final change order issued at the end of the project. This final change order should itemize all bid item quantities that are being modified. A justification shall also be provided that explains why the items require an adjustment. The Sponsor and Engineer should note that if quantities are adjusted upward, the Contractor may be entitled to a proportional increase in the contract time (Para. 80-07, AC 150/5370-10).

#### **Execution**

Following FAA concurrence and execution of the change order between the Sponsor and the contractor, one signed copy of the change order shall be forwarded to the FAA. Generally, work covered by a change order should not commence until an agreement is signed between the Sponsor and the Contractor.

**Grant Limitation:** The Sponsor and Engineer should be aware that the approval and execution of change orders will likely impact the final Federal share of Grant Agreement. The FAA approval of a change order is subject to the limitations of the Grant Agreement. Each AIP grant contains a provision that limits upward adjustment of the maximum obligation to 15% over the original grant amount. Additional project costs, which may be declared eligible for AIP participation, can actually be denied for reimbursement if the additional costs result in a Federal share that exceeds the 15% limitation.

Sponsors shall further note that while the maximum obligation of a Grant may be increased up to 15%, reimbursement of costs that exceed the original grant amount is contingent upon the availability of recovery funds from other closed grants. Such reimbursements are not guaranteed and can take several months to finalize.

## **RESOURCES**

# **Advisory Circulars**

• AC 150/5370-10: Standards for Specifying Construction

# **Federal Regulations**

 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

# 1082 - Supplementary Agreements Development Projects

#### General

A Supplemental Agreement is a written agreement between the Contractor and the owner covering:

- 1. Work that is not within the scope of the originally awarded contract (Para. 10-43, AC 150/5370-10A) or;
- 2. Work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract.

A major contract item may be any item that is listed in the proposal, the total cost of which is equal to or greater than 20 percent of the total amount of the award contract. All other items shall be considered minor contract items (Para. 10-27, AC 150/5370-10A)

In general, a supplemental agreement should be viewed as a separate contract requiring execution by both parties; the Sponsor and the Contractor. Sponsors should be aware that execution of a supplementary agreement could affect various provisions of the Contract. When proposing a supplementary agreement, the Sponsor must address the impact to the following contract requirements:

- Wage Rates: As a supplemental agreement is considered as a separate contract, the Sponsor may be required to obtain the latest wage determination (Par. 940b, 5100.38B). If the supplement agreement exceeds \$2,000, a current wage rate determination would need to be incorporated into the supplemental agreement.
- 2. **Surety & Bonding:** Issuance of a supplemental agreement may require the consent of the Contractor's surety. If the supplement is large in value, a revision to the existing performance and payment bonds may be required.

### **FAA Review and Concurrence**

All supplemental agreements must be reviewed and approved by the FAA to determine AIP eligibility. It is recommended that the Sponsor and the Engineer contact the FAA in advance to ascertain reasonableness of costs and justification for the modification. In order to remain eligible for AIP participation, formal written approval by the FAA is required. As a minimum, the Sponsor submittal for a proposed supplemental agreement shall contain the following:

- 1. Sponsor cover letter that states their justification and concurrence with the supplemental agreement.
- 2. Supplemental Agreement document with estimated quantities, unit prices, and description of work and justification.
- 3. Engineer's independent cost analysis.
- 4. Drawings/Sketches (As needed).
- 5. Revised Performance and Payment Bonds (As needed).
- 6. New wage rate determination (As needed).

# **Execution**

Following FAA review and concurrence, one executed copy of the supplemental agreement shall be forwarded to the FAA. Work covered by a supplemental agreement shall not proceed until an executed agreement is in place.

# **RESOURCES**

# **Advisory Circulars**

• AC 150/5370-10: Standards for Specifying Construction

# **Federal Regulations**

• 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments